

IN THE CLAIMS:

The following is a complete listing of the claims, and replaces all earlier version and listings.

1. - 11. (canceled).

12. (currently amended): A network device management apparatus which has ~~network connection means and~~ manages a network device ~~which~~ that is connected to a network, ~~where the network~~ said device having ~~has~~ a plurality of functions ~~and does not support any network compatible Plug and Play function,~~ said apparatus comprising:

~~storage means for storing a network address of at least one network device that does not support any network compatible Plug and Play function, and function information associated with a plurality of functions of the network device; and~~

~~recognition means for recognizing a network device not supporting the network compatible Plug and Play function;~~

~~generating means for, if said recognition means recognizes a network device not supporting the network compatible Plug and Play function, generating a plurality of device IDs corresponding to a plurality of functions of the network device recognized by said recognition means, where each device ID includes at least information identifying the model, information indicating the manufacturer and information indicating one of the plurality of functions of the recognized network device, so that, in accordance with network compatible supporting Plug and Play function, a client apparatus on the network can install a plurality of device drivers for controlling the plurality of functions of the network device recognized by said recognition means; and~~

response means for responding to the client apparatus using the plurality of device IDs generated by said generating means

response means for unit which, when a location confirmation request of a network compatible Plug and Play device is received via the network connection means; generating and returning a message including identification information which specifies the network device that does not support the network compatible Plug and Play function as a plurality of independent virtual network compatible Plug and Play devices corresponding to the functions indicated by the plurality of pieces of function information stored in said storage means;

wherein said identification information identifying the plurality of independent virtual network compatible Plug and Play devices is used for installing a plurality of device drivers corresponding to the plurality of independent virtual network compatible Plug and Play devices.

13. (currently amended): The apparatus according to claim 12, ~~wherein the function information stored in said~~ further comprising storage means includes for storing protocol information required to communicate with a network device to be stored.

14. (currently amended): The apparatus according to claim ~~[[13]]~~ 12, further comprising control means for, when job information addressed to the virtual network compatible Plug and Play device is received ~~via the network connection means~~, acquiring an address and protocol information of the corresponding network device from said storage means, converting the job information into the acquired protocol, and transmitting the converted information to the acquired address.

15. (previously presented): The apparatus according to claim 12, wherein the functions indicated by the function information include functions of a plurality of different printer drivers that can generate print data which can be processed by the network device.

16. (currently amended): The apparatus according to claim [[12]] 13, further comprising:

search means for searching for a network device which does not support any network compatible Plug and Play function; and

registration means for registering in said storage means a network address of the network device found by said search means, and information for specifying a protocol used in a communication with the network device found by said search means[[]; and]]

~~generation means for generating a message to be returned by said response means in place of the registered network device.~~

17. (previously presented): The apparatus according to claim 16, wherein said search means determines, as a network device group that does not support any network compatible Plug and Play function, a network device group which remains after excluding network devices detected as a search result of a UPnP network protocol from a network device group detected by a search of an SNMP protocol.

18. (previously presented): The apparatus according to claim 12, wherein the network device is a network printer.

19. (currently amended): The apparatus according to claim 18, wherein, when the network device supports a plurality of printer languages, said response means responds as a logically virtual network compatible Plug and Play printer which is independent for each individual printer language.

20. (currently amended): A method of controlling a network device management apparatus which ~~has network connection means and~~ manages a network device which ~~that~~ is connected to a network, ~~where the network~~ said device having ~~has~~ a plurality of functions ~~and does not support any network compatible Plug and Play function.~~ said method comprising the steps of:

~~generating and returning, when a location confirmation request of a network-compatible Plug and Play device is received via the network connection means, a message including identification information which specifies the network device that does not support the network-compatible Plug and Play function as a plurality of independent virtual network-compatible Plug and Play devices corresponding to the functions indicated by a plurality of pieces of function information stored in the storage means;~~

~~wherein the identification information identifying the plurality of independent virtual network-compatible Plug and Play devices is used for installing a plurality of device drivers corresponding to the plurality of independent virtual network-compatible Plug and Play devices~~

recognizing a network device not supporting the network compatible Plug and Play function;

if in said recognizing step there is recognized a network device not supporting the network compatible Plug and Play function, generating a plurality of device

IDs corresponding to a plurality of functions of the network device recognized by said recognition means, where each device ID includes at least information identifying the model, information indicating the manufacturer and information indicating one of the plurality of functions of the recognized network device, so that, in accordance with network compatible supporting Plug and Play function, a client apparatus on the network can install a plurality of device drivers for controlling the plurality of functions of the network device recognized in said recognizing step; and  
responding to the client apparatus using the plurality of device IDs  
generated in said generating step.

21. (currently amended): A ~~computer program, stored in a computer-readable storage medium, storing, in executable form, a program for causing a computer to~~  
serve ~~serving~~ as a network device management apparatus which ~~has network connection means, and storage means for storing a network address of at least one network device that does not support any network-compatible Plug and Play function; and protocol information used to communicate with the network device; and manages a network device~~ that is  
~~connected to a network, said~~ where the network ~~device having~~ has a plurality of functions  
~~and does not support any network compatible Plug and Play function, said program~~  
~~comprising code for performing the steps of:~~

~~generating and returning, when a location confirmation request of a~~  
~~network-compatible Plug and Play device is received via the network connection means, a~~  
~~message including identification information which specifies the network device that does~~  
~~not support the network-compatible Plug and Play function as a plurality of independent~~

virtual network-compatible Plug and Play devices corresponding to the functions indicated by a plurality of pieces of function information stored in the storage means;

wherein the identification information identifying the plurality of independent virtual network-compatible Plug and Play devices is used for installing a plurality of device drivers corresponding to the plurality of independent virtual network-compatible Plug and Play devices

recognizing a network device not supporting the network compatible Plug and Play function;

if in said recognizing step there is recognized a network device not supporting the network compatible Plug and Play function, generating a plurality of device IDs corresponding to a plurality of functions of the network device recognized by said recognition means, where each device ID includes at least information identifying the model, information indicating the manufacturer and information indicating one of the plurality of functions of the recognized network device, so that, in accordance with network compatible supporting Plug and Play function, a client apparatus on the network can install a plurality of device drivers for controlling the plurality of functions of the network device recognized in said recognizing step; and

responding to the client apparatus using the plurality of device IDs generated in said generating step.

22. (canceled).

23. (currently amended): The method according to claim 20, wherein the function information stored in the storage means includes further comprising the step of storing protocol information required to communicate with a network device to be stored.

24. (currently amended): The method according to claim ~~[[23]]~~ 20, further comprising a control step of, when job information addressed to the virtual network-compatible Plug and Play device is received ~~via the network connection means~~, acquiring an address and protocol information of the corresponding network device from said storage means, converting the job information into the acquired protocol, and transmitting the converted information to the acquired address.

25. (previously presented): The method according to claim 20, wherein the functions indicated by the function information include functions of a plurality of different printer drivers that can generate print data which can be processed by the network device.

26. (currently amended): The method according to claim ~~[[20]]~~ 23, further comprising:

a search step of searching for a network device which does not support any network-compatible Plug and Play function; and

a registration step of registering in ~~[[the]]~~ storage means a network address of a network device found in said search step, and information for specifying a protocol used in a communication with the network device found in said search step; and

a generation step of generating a message to be returned in said step of generating and returning in place of the registered network device.

27. (previously presented): The method according to claim 26, wherein said search step includes determining, as a network device group that does not support any network-compatible Plug and Play function, a network device group which remains after excluding network devices detected as a search result of a UPnP network protocol from a network device group detected by a search of an SNMP protocol.

28. (previously presented): The method according to claim 20, wherein the network device is a network printer.

29. (currently amended): The method according to claim 28, wherein, when the network device supports a plurality of printer languages, said step of generating and returning includes responding as a logically ~~virtual~~ network-compatible Plug and Play printer which is independent for each individual printer language.

30. - 34. (canceled).